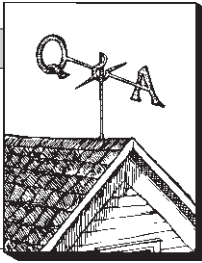


# Is Vinyl Moisture-Proof

by Henry Spies



## Breathable Vinyl

**Q.** How should vinyl siding be installed to vent moisture out of the wall cavities? It seems that just slapping it over the sheathing is like wrapping the house in a plastic bag.

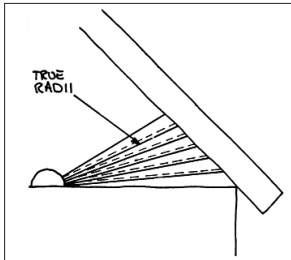
**A.** The way vinyl siding is normally installed, there are enough cracks to allow most of the moisture to vent out. Many kinds of vinyl siding also have weep holes along the bottom edge for this purpose. It is important to ensure that the sheathing underneath the siding is permeable. Fiberboard sheathing or expanded polystyrene is best. The foil-faced or extruded foams have very low permeabilities.

## Fanning Clapboards

**Q.** Is there a standard procedure for fanning clapboards on a gable-end wall? How should the center be detailed?

**A.** The method I have seen most often used starts with a semicircular center piece, plain or carved, about 8 inches in diameter. The end of each piece of siding is butted to it, and the joint sealed with caulk.

The siding is ripped to the appropriate taper cutting off the thick (butt) edge of the clapboard, with the top edge remaining uncut. The piece is installed with the cut edge positioned as a true radius of the semicircle. The siding is started at the bottom of each side and a vertical batten is installed where the two sides meet in the center (see illustration).



**Fanning clapboards on a gable end:** The dotted line shows the top edge of each clapboard underneath the bottom edge of the clapboard above. Each clapboard has been ripped to a taper along the bottom (butt) edge.

## Bracing Brick Walls

**Q.** When cutting an opening through a brick wall, how can it be supported before the lintel is installed?

**A.** Much depends on the size of the opening and the loading on the wall. If the wall is just brick veneer, there is usually enough arching action to support the brick above. If it is a load-bearing wall, the best way to support the wall is to punch through every few feet in the brick above the opening, and insert beams supported on both sides of the wall. The arching action of the brick will support the walls between the beams. The term

for this installation is needle-bracing. If there is a floor or ceiling load on only one side, use a girder and two posts to temporarily support the joists a foot or two inside the bearing wall.

## Fastening Foam

**Q.** What's the best way to secure foam insulation to a concrete foundation below grade? Is the backfill enough to hold it in place?

**A.** The backfill will hold the insulation to the wall well enough, but some adhesive is often used to hold the foam in place during the backfilling operation. The adhesive should be made for use with foam, since many general-purpose construction adhesives will dissolve the foam. Unless the insulation is fully adhered to the foundation, a drainage membrane on the outside of the insulation is a good idea.

## Clapboards Over Concrete

**Q.** My customer wants me to extend the clapboard siding down over an exposed concrete foundation on a renovation. There's no room to fur out the wall and still keep the new siding in the same plane as the old. Can I secure the siding directly to the concrete? What sort of fasteners do you recommend? And how should the wall and siding be treated to prevent paint problems from moisture?

**A.** The siding can go directly over the concrete but the fastening is a problem. Much depends upon the age and strength of the concrete. Hardened concrete nails are available from specialty supply houses for some pneumatic nailers. These will work if the concrete is not too hard. Concrete screws such as TapCons (Elco Industries, Rockford, Ill., 800/435-7213) might also work but would require predrilling both the wall and the clapboards. If a hammer drill is used for the predrill, these screws can be used on high-strength concrete, however. If these fasteners will not work, it may be necessary to drill and install plastic or lead anchors and use screws.

Another alternative would be to make cuts in the concrete to hold vertical wood strips to which the siding is nailed. Either of the latter solutions would be costly, but there are no adhesives which I would recommend for this use. The siding should be back-primed to control moisture, and a sheet of polyethylene could be installed between the concrete and the siding from the plate to the bottom of the siding. ■

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